

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,926		07/23/2002	Josef Pickel	R.38168	9744
2119	7590	07/28/2003			
RONALI GREIGG			EXAMINER		
GREIGG & GREIGG P.L.L.C. 1423 POWHATAN STREET, UNIT ONE ALEXANDRIA, VA 22314				EVANS, GEOFFREY S	
TIDE/TIT	DidA, V	4 22314		ART UNIT	PAPER NUMBER
	•			1725	
•				DATE MAILED: 07/28/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

,	·	Application No.	Applicant(s)	<del>/</del> /
		10/069,926	PICKEL ET AL.	,
	Office Action Summary	Examiner	Art Unit	
		Geoffrey S Evans	1725	
Period f	The MAILING DATE of this communication ap or Reply	ppears on the cover sheet with t	the correspondence address	
- Exte after - If the - If NO - Failu - Any	ORTENED STATUTORY PERIOD FOR REPI MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period in the reply within the set or extended period for reply will, by statuted the reply received by the Office later than three months after the mailine and patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply ply within the statutory minimum of thirty (30 I will apply and will expire SIX (6) MONTHS	be timely filed  ) days will be considered timely.  from the mailing date of this communic	ation.
1)	Responsive to communication(s) filed on	·		
2a)□	This action is <b>FINAL</b> . 2b)⊠ T	his action is non-final.		
3) Disposit	Since this application is in condition for allow closed in accordance with the practice under ion of Claims	vance except for formal matters or <i>Ex parte Quayle</i> , 1935 C.D. 1	s, prosecution as to the men 1, 453 O.G. 213.	ts is
4) 🖂	Claim(s) 11-30 is/are pending in the application	on.		
	4a) Of the above claim(s) is/are withdra			
1	Claim(s) is/are allowed.			
	Claim(s) <u>11,12 and 16-30</u> is/are rejected.			
l	Claim(s) 13-15 is/are objected to.			
i	Claim(s) are subject to restriction and/o	or election requirement		
Applicati	on Papers	or oronom roquiromonic.		
9) 🗌 -	The specification is objected to by the Examine	er.		
10) 🔲 🗆	Γhe drawing(s) filed on is/are: a)□ acce	pted or b) objected to by the E	Examiner.	
	Applicant may not request that any objection to the			
11) 🔲 🗆	he proposed drawing correction filed on	_ is: a)☐ approved b)☐ disap		
	If approved, corrected drawings are required in re		. ,	
12) 🔲 7	The oath or declaration is objected to by the Ex	kaminer.		
Priority u	nder 35 U.S.C. §§ 119 and 120			
13)⊠	Acknowledgment is made of a claim for foreigi	n priority under 35 U.S.C. § 11	9(a)-(d) or (f)	
	☑ All b) ☐ Some * c) ☐ None of:	, ,	- (-) (-) - (-)	
	1. Certified copies of the priority document	s have been received.		
	2. Certified copies of the priority document		eation No	
	3.⊠ Copies of the certified copies of the prio application from the International Bu ee the attached detailed Office action for a list	rity documents have been rece reau (PCT Rule 17 2(a))	eived in this National Stage	
	cknowledgment is made of a claim for domesti			
a)	☐ The translation of the foreign language pro	visional annication has been	roccivod	uon).
15) <b>∏</b> A	cknowledgment is made of a claim for domesti	ic priority under 35 U.S.C. §§ 1	20 and/or 121.	
Attachment(				
2) Notice	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449) Paper No(s)	5)   Notice of Inform	nary (PTO-413) Paper No(s) al Patent Application (PTO-152)	. •
S. Patent and Tra				

Art Unit: 1725

## **DETAILED ACTION**

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "FORMING BORES WHILE VIBRATING ELECTRODE WIRE DURING ELECTRIC DISCHARGE MACHINING".

- 2. The abstract of the disclosure is objected to because of the inclusion of legal phraseology. Correction is required. See MPEP § 608.01(b).
- 3. The exemplary language in the preamble of claim 1 on lines 2 and 3 "in particular injection ports(11) in injection nozzles (10) of fuel injection systems for motor vehicles" is not considered to be a positive claim limitation in this office action.
- 4. Claims 16-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear whether apparatus claims 16,17, and 18 are intended to be independent claims and the metes and bounds of these claims that depend upon method claims. Respectfully suggest rewriting claims 16,17 and 18 as apparatus claims that do not refer to any method claims.
- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1725

6. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue in U.S. Patent No. 4,455,469 in view of Laughton et al. in U.S. Patent No. 5,023,422. Inoue discloses as shown in figure 1 uses an electrode wire (element 1) that is excited in a plane parallel to the workpiece. Laughton et al. teaches controlling the vibrations of an electrode or electrodes to form a hole in the workpiece, and vibrating the electrode at the end of the electrode. It would have been obvious to adapt Inoue in view of Laughton et al. to provide this to machine the hole to a desired shape.

- 7. Claims 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 8. Claims 16-30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Inoue in U.S. Patent No. 4,436,976, Chalkin in U.S. Patent No. 5,159,167, Sawada et al. in U.S. Patent No. 5,773,781, Inoue in Japan Patent No. 56-82,124, Inoue in Japan Patent No. 63-216,631 were cited during the PCT prosecution corresponding to this application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey S Evans whose telephone number is (703)-308-1653. The examiner can normally be reached on Mon-Fri 6:30AM to 4:00 PM, alternate Fridays off.

Art Unit: 1725

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (703)-308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9310 for regular communications and (703)-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0661.

Geoffey S Evans Primary Examiner Art Unit 1725

GSE July 20, 2003